

# WATER-PERMEABLE COMPOSITE SHEET

Publication number: JP9076388 (A)

Publication date: 1997-03-25

Inventor(s): SUZUKI MEGAKU; FUKUI HIROAKI

Applicant(s): NIPPON KYUSHUTAI GIJUTSU KENKY

Classification:

- international: A61F13/511; A61F5/44; A61F13/15; A61F13/49; B32B5/26; D04H1/54; A61F5/44; A61F13/15; B32B5/22; D04H1/54; (IPC1-7): B32B5/26; A61F5/44; A61F13/15; A61F13/54; D04H1/54

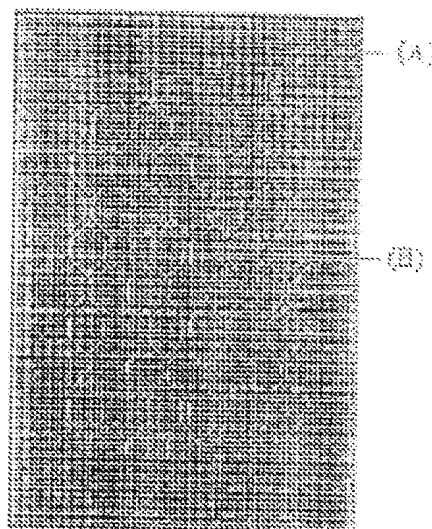
- European:

Application number: JP19950239595 19950919

Priority number(s): JP19950239595 19950919

## Abstract of JP 9076388 (A)

**PROBLEM TO BE SOLVED:** To obtain an adequate water permeability and also obtain an excellent feel of surface dryness and an excellent touch of texture without providing an open hole by mutually bonding common components of the same easily heat-melting material in a hydrophobic layer and an adjacent hydrophilic layer through a melt-bonding process. **SOLUTION:** This water-permeable composite sheet is obtained by stacking a layer B obtained by making hydrophilic only the surface of a netted product produced by extrusion-molding a raw material such as PE on a layer A such as a PE/PET conjugate spunbond unwoven cloth to subject them to a melt-bonding process. In this process, the water permeability of the melt-bonded part formed becomes the higher, as a heating temperature is higher, and the pressure is higher, provided that the temperature is the same, but on the other hand, its surface form is more like a film in terms of its surface form to have harder hand, increased in its surface strength.



Ref.

**COMPOSITE NONWOVEN FABRIC****Publication number:** JP10168728 (A)**Publication date:** 1998-06-23**Inventor(s):** MOTOMURA SHIGEYUKI; NISHINO KAZUNARI**Applicant(s):** MITSUI CHEMICALS INC**Classification:**

- International: B32B5/26; B32B27/32; D04H3/00; D04H3/16; B32B5/22;  
B32B27/32; D04H3/00; D04H3/16; (IPC1-7) D04H3/16;  
B32B5/26; B32B27/32; D04H3/00

- European:

**Application number:** JP19960324075 19961204**Priority number(s):** JP19960324075 19961204

Also published as:

JP3712487 (B2)

**Abstract of JP 10168728 (A)**

**PROBLEM TO BE SOLVED:** To obtain a composite nonwoven fabric excellent in flexibility and liquid absorbability, capable of maintaining the excellent liquid absorbability over a long period and excellent in surface touch. **SOLUTION:** This composite nonwoven fabric comprises a front surface layer 1 comprising a water-repelling nonwoven fabric 4 having holes and tubes 3 downwardly extended from the holes and a back surface layer 2 comprising a hydrophilic nonwoven fabric 9 laminated to the lower surface of the front surface 1. Therein, the water-repelling nonwoven fabric 4 comprises a melt-blown nonwoven fabric comprising (A) an ethylenic polymer or a resin composition containing the ethylenic polymer A, and the hydrophilic nonwoven fabric comprises a melt-blown nonwoven fabric comprising (B) an ethylenic polymer. The density  $d_A$  of the ethylenic polymer A or the resin composition containing the ethylenic polymer A is larger ( $d_A > d_B$ ) than the density  $d_B$  of the ethylenic polymer B, and the density  $d_A$  is  $\geq 0.94 \text{ g/cm}^3$ .

